REMARKS

In response to the Official Action of February 22, 2005, claims 1, 5 and 11 have been amended in a manner which is believed to distinguish the claims of the present application over the cited art. Preliminarily, applicant's attorney notes that on the Office Action Summary page item 10 concerning the drawings simply makes reference to drawings filed on 27 August 2003 but makes no indication as to whether the drawings are accepted or objected to. Correction is respectfully requested.

Referring now to the claim rejection under 35 U.S.C. §103, it is respectfully submitted that claims 1-12 in view of the amendment to claims 1, 5 and 11 are now distinguished over EP0910165A2, Kimppa, et al (hereinafter Kimppa), further in view of Thommann et al IEEE article previously submitted in applicant's Information Disclosure Statement. Kimppa is directed to a method and arrangement for calibrating an active filter (see paragraph 0001). As shown in Figure 1 of Kimppa, a filter arrangement comprises a microcircuit (100) that in turn comprises a filter circuit (200), a filter calibrating circuit (300) and possible other electronic circuits (400) as disclosed at paragraph 0009. Figure 3 of Kimppa shows that the filter circuit (200) comprises resistances (R1, R2) and integrated capacitances (C11, C12) while the filter calibrating unit (300) comprises integrated resistance (R_{ref}) and an integrated capacitance (C_{ref}).

Because of the manufacturing process disclosed in Kimppa, the resistance values in the microcircuit can deviate from their nominal values in the same direction and proportionally to the same extent. Similarly, the capacitance values can deviate from their nominal values proportionally to the same extent. Because of this phenomena, the calibration may use the integrated reference resistance (R_{ref}) and the reference capacitance (C_{ref}) instead of the component parts in the filter (200) in order that there be no need to work with the integrated filter construction in order to adjust its component values. Thus, the resistances (R1, R2) in the filter construction and in the calibration circuit are adjustable. The adjustment is carried out using a common control word. Correspondingly, the capacitances (C11, C12) in the filter construction

and capacitance (C_{ref}) in the calibration circuit are adjustable by a common control word (see paragraph 0012 of Kimppa). The Thommann IEEE article describes an IF receiver and an IF transmitter which include a complete PLL. This is disclosed in the abstract of Thommann. The present invention is directed to a method and apparatus for calibrating an integrated loop-filter of a PLL in a simple and straightforward manner. This is made clear in the specification at page 2, lines 16-17.

Amended claim 1 is particularly directed to a method of automatically calibrating a loop-filter of a phase locked loop. It specifically now recites that the loop-filter comprises at least one RC-filter component which is integrated on a single chip together with a calibrating component and with at least one RC-filter component of an entity other than said phase locked loop and other than said calibrating component. The method comprises tuning the at least one RC-filter component of said loop-filter by means of the calibrating component based on measurements performed on said at least one RC-filter component of said other entity. Support for this amendment to claim 1 is found in the figures of the present application as filed, as well as the specification, including page 3, lines 10-31.

It is therefore clear from amended claim 1 that the RC-filter component of said other entity is explicitly different from the calibrating component, as is clearly seen in Figure 1 where the calibrating component (3) is shown as being distinct from the RC-filter component (4) of said other entity. This arrangement and the resulting method is different from the arrangement disclosed in Kimppa wherein RC-filter components of a calibration component (RC components R_{ref} and C_{ref}, as well as logic unit 330 and comparator A2 all forming part of calibrating unit 300) are used, which therefore means that additional RC-filter components have to be provided for this calibration component which renders the calibration component more complex. With the present invention, such additional RC-filter components – provided exclusively as reference RC-filter components for purposes of tuning the RC-filter components of a loop-filter – are rendered

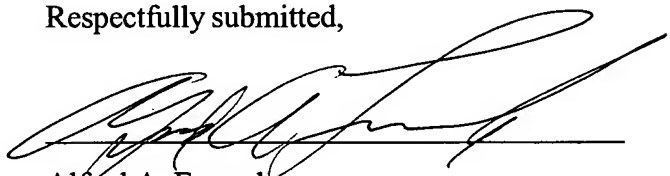
superfluous. It is therefore respectfully submitted that claim 1 as amended is distinguished over Kimppa further in view of Thommann.

Similar amendment has been made to integrated circuit chip claim 5 and independent unit claim 11. For similar reasons as set forth above with regard to amended claim 1, independent claims 5 and 11 are therefore believed to be distinguished over Kimppa further in view of Thommann.

In view of the fact that independent claims 1, 5, and 11 are believed to be distinguished over the cited art, it is respectfully submitted that the claims dependent upon these independent claims (claims 2-4 which ultimately depend from claim 1; claims 6-10 which ultimately depend from claim 5; and claim 12 which depends from claim 11) are also distinguished over the cited art.

It is therefore respectfully submitted that the present application as amended is in condition for allowance and such action is earnestly solicited.

Respectfully submitted,



Dated: June 22, 2005

Alfred A. Fressola
Attorney for Applicant
Registration No. 27,550

WARE, FRESSOLA, VAN DER SLUYS
& ADOLPHSON LLP
Bradford Green, Building Five
755 Main Street, P.O. Box 224
Monroe, CT 06468
Telephone: (203) 261-1234
Facsimile: (203) 261-5676
USPTO Customer No. 004955